

ABSTRACT OF THE DISCLOSURE

A traffic and radio resource control in a wireless device with multiple operation modes is disclosed. For accomplishing an efficient use of physical and radio resources in terms of the required service level, a first set of radio transmission resources is selected for an assembled output data stream. A path is then searched for with respect to each destination node of the stream, each path leading from the wireless communication device to the destination node in question and fulfilling the service level requirement corresponding to that destination node. The transmission of the output data stream is then scheduled according to the current state of the wireless communication device, when a path is found for each of the destination nodes. The operation modes of the wireless communication device are controlled to maintain the required service level during the transmission.